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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/635,824      | 08/10/2000  | Bei-Hong Liang       | IP-5551             | 6032             |

7590 08/27/2003

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EXAMINER

FERGUSON, LAWRENCE D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1774

14

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-64

|                              |  |                                     |  |
|------------------------------|--|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/635,824   | <b>Applicant(s)</b><br>LIANG ET AL. |  |
|                              | <b>Examiner</b><br>Lawrence D Ferguson | <b>Art Unit</b><br>1774             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 23-30 is/are rejected.
- 7) ☒ Claim(s) 20-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6</u> . | 6) <input type="checkbox"/> Other:  |

**DETAILED ACTION**

***Response to Request for Reconsideration***

1. This action is in response to the request for reconsideration mailed June 17, 2003. Examiner withdraws the previous rejections to further prosecute the claimed invention. Claims 1-30 are pending in this case.

***Claim Rejections – 35 USC § 102(b)***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Seale et al. (U.S. 5,492,756).

Seal discloses a fibrous article comprising kenaf core material (kenaf hurd) of various lengths up to 50 mm and a binder resin (column 2, lines 30-50). Seal discloses the binder resin constitutes 2-20 percent weight of the fibrous material (column 3, lines 3-10) where the material is cured (abstract and column 1, lines 9-10). The reference discloses a phenolic resin is used as the binder (column 4, lines 8-11) along with a moisture content value of no more than 10 percent (column 3, lines 14-17). Because the fibrous article of Seal comprises the same materials having the same functions as

instantly claimed, it is inherent that the fibrous article of Seal comprises a specific gravity and sizing agent as claimed by Applicant.

The claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Mere recitation of newly-discovered function or property, inherently possessed by things in prior art, does not cause claim drawn to those things to distinguish over prior art; Patent Office can require applicant to prove that subject matter shown to be in prior art does not possess characteristic relied on where it has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may be inherent characteristic of prior art; this burden of proof is applicable to product and process claims reasonably considered as possessing allegedly inherent characteristics.

***Claim Rejections – 35 USC § 103(a)***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 4-6, 9-19 and 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seale et al. (U.S. 5,492,756) in view of WO 00/69607 (WO '607).

Seal discloses a fibrous article comprising kenaf core material (kenaf hurd) of various lengths up to 50 mm and a binder resin (column 2, lines 30-50). Seal discloses the binder resin constitutes 2-20 percent weight of the fibrous material (column 3, lines 3-10) where the material is cured (abstract and column 1, lines 9-10). The reference discloses a phenolic resin is used as the binder (column 4, lines 8-11) along with a moisture content value of no more than 10 percent (column 3, lines 14-17). Seal does not disclose the fibrous material comprises hemp hurd. WO '607 teaches a fibrous article comprising hemp hurd (abstract and page 2, lines 14-15) having a length of less than about 30mm (page 6, lines 15-16). Seal and WO '607 are analogous art because they are both from the same field of fibrous articles. It would have been obvious to one of ordinary skill in the art to include hemp hurd in the fibrous article of Seal because WO '607 teaches the conventionality of using inner fiber core material (page 4, lines 15-16) to make fibrous composite articles (page 3, lines 1-5).

Neither Seal nor WO '607 shows that the fibrous article has a smoothness value, internal bond strength or cleavage as in instant claims 10-12, 14-19 and 24-30. However, such features are properties which can be easily determined by one of ordinary skill in the art. With regard to the limitations of the smoothness value, internal bond strength and cleavage, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. smoothness value, internal bond strength and cleavage) fails to render claims patentable in the absence of unexpected results. All of the

aforementioned limitations are optimizable as they directly affect the integrity and durability of the fibrous article. As such, they are optimizable. It would have been obvious to one of ordinary skill in the art to make the fibrous article with the limitations of the smoothness value, internal bond strength and cleavage since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215 (CCPA 1980).

6. Claims 20-22 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

7. Applicant's remarks to rejection made under 35 U.S.C. 103(a) as being unpatentable over Flowers et al. (U.S. 4,131,664) have been considered and are moot based on grounds of new rejection.

Applicant's remarks to rejection made under 35 U.S.C. 103(a) as being unpatentable over Flowers et al. (U.S. 4,131,664) in view of Chow (U.S. 3,927,235) have been considered and are moot based on grounds of new rejection.

Applicant's remarks to rejection made under 35 U.S.C. 103(a) as being unpatentable over Flowers et al. (U.S. 4,131,664) in view of Chow (U.S. 3,927,235)

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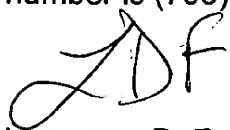
further in view of Turner (U.S. 5,871,614) have been considered and are moot based on grounds of new rejection.

Applicant's remarks to rejection made under 35 U.S.C. 103(a) as being unpatentable over Flowers et al. (U.S. 4,131,664) in view of Chow (U.S. 3,927,235) further in view of Riebel et al. (U.S. 5,635,123) have been considered and are moot based on grounds of new rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson  
Examiner  
Art Unit 1774



ELIZABETH MULVANEY  
PRIMARY EXAMINER